

## REMARKS

This is a full and timely response to the outstanding final Office Action mailed January 3, 2007. Reconsideration and allowance of the application and pending claims are respectfully requested.

### **I. Claim Rejections - 35 U.S.C. § 102(e)**

Claims 7-29 and 31-37 have been rejected under 35 U.S.C. § 102(e) as being anticipated by *Yacoub* (U.S. Pub. No. 2003/0011805). Applicant respectfully traverses this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e).

In the present case, not every feature of the claimed invention is represented in the *Yacoub* reference. Applicant discusses the *Yacoub* reference and Applicant's claims in the following.

#### **A. The Yacoub Disclosure**

*Yacoub* discloses a "virtual printer" that determines the most appropriate printer as determined by user print job preferences and physical location. *Yacoub*, Abstract. *Yacoub*'s virtual printer makes the physical location determination by consulting a map

that indicates the position of the various printers in a system with X and Y coordinates.

As described by Yacoub:

In another embodiment, the virtual printer/server will access a coordinate mapped list of the physical locations of each printer. The topmost ranked printer according to speed and quality will be indexed with the coordinate  $(X_1, Y_1)$ . The user or workstation generating the print job can also be identified by a coordinate location by accessing a similar coordinate map list for workstations, and has a coordinate  $(X_2, Y_2)$ . The distance between the topmost ranked printer and the user/workstation is determined by server/virtual printer computing the formula  $\sqrt{(X_2 - X_1)^2 + (Y_2 - Y_1)^2}$ . If the second ranked printer is determined by the virtual printer/server to be equally or closely capable with the topmost ranked printer, then the distance of the second ranked printer (coordinate  $(X_3, Y_3)$ ) is determined according to the formula  $\sqrt{(X_3 - X_2)^2 + (Y_3 - Y_2)^2}$ . This distance is compared with the distance from the user to the topmost ranked printer to determine which of the two printers is most "appropriate" printer complying with the user's speed/quality preferences and closer than other printers of similar capability.

Yacoub, paragraph 0027.

Significantly, Yacoub says *nothing* about determining locations/distances of printers in relation to determining a switch and/or port to which the printer is coupled.

## B. Applicant's Claims

### 1. Claims 7-19

Independent claim 7 provides as follows (emphasis added):

7. One or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network;

**obtaining**, for at least one of one or more network switches in the network, ***an indication of which port of the network switch a computing device is coupled to;***

**obtaining**, for each of the one or more identified devices and for the at least one network switch, ***an indication of which port of the network switch the identified device is coupled to;*** and

**determining**, for at least one of the one or more identified devices, ***how physically distant the identified device is*** to the computing device, wherein the determining is ***based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to.***

Yacoub fails to teach most of the limitations of claim 7. As a first matter, Yacoub clearly does not teach "obtaining . . . an indication of *which port* of the network switch a computing device is coupled to" (emphasis added). Paragraph 0020 of the Yacoub reference, which was relied upon by the Examiner, says nothing about identifying a "port" to which a computing device is connected. Instead, all that Yacoub describes in that paragraph is a virtual printer that "automatically selects an appropriate printer, by

querying and computing location". Therefore, Yacoub does not even mention switch ports or the coupling of a "computing device" to such a port.

Second, Yocoub clearly does not teach "obtaining . . . an indication of *which port* of the network switch the identified device is coupled to" (emphasis added). Paragraph 0020 of the Yacoub reference, which was relied upon by the Examiner, has been described above. As indicated in that description, paragraph 0020 does not even mention switch ports. Regarding paragraph 0036, which was also relied upon by the Examiner, that paragraph also lacks a teaching of identifying a switch port. Instead, that paragraph only describes a server that queries printers for information and "keeps a mapping of the geographical location of the printers". Applicant notes that "geographical location" as used by Yacoub pertains to the physical placement of the printers, not what devices to which they are connected.

Third, Yacoub certainly does not teach "determining . . . how physically distant the identified device is to the computing device . . . based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to". Again, Yacoub does not obtain any indication of a switch port to which a computing device or other device is connected. It therefore follows that Yacoub cannot anticipate the above limitation. Furthermore, Applicant reiterates that Yacoub determines location/distance of printers *based upon an X-Y coordinate map and not based upon device connectivity*. Applicant notes that nothing in the Yacoub disclosure indicates or suggests that the "map" is a mapping of the network's switches and ports.

Indeed, it appears clear that the map is simply a conventional map on which X and Y coordinates are defined.

Due to the shortcomings of the Yacoub reference described in the foregoing, Applicant respectfully asserts that Yacoub does not anticipate claim 7 or the claims that depend therefrom. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

In the Response to Arguments section of the final Office Action, the Examiner states:

In the remarks applicant argue [sic] in substance that Yacoub does not disclose or suggest determination of location/distance of printers on a network. In response to that, Yacoub discloses directing of print jobs in a network printing system where user/client requests a print job using a command on a GUI menu. When the request is input, a server is queried to locate the physical locations of each printer on the network using the coordinate (x,y) system. Once the locations of these printers are determined the server determines the most appropriate printer that is closes to the client/user (see paragraph 0027).

*Final Office Action*, pages 13-14. In reply, Applicant notes that Applicant did not argue that "Yacoub does not disclose or suggest determination of location/distance of printers on a network." To the contrary, Applicant explicitly acknowledged that fact. What the Examiner fails to appreciate is that Applicant is not merely claiming determining the distance of printers. Instead, Applicant explicitly claims a method in which the distances of network devices from a computer are *inferred from the switches and/or ports to which those network devices are coupled*. Yacoub neither teaches nor suggests anything of the

sort. Instead, as acknowledged by the Examiner, Yacoub directly determines distance from X and Y coordinates.

## 2. Claims 20-28

Independent claim 20 provides as follows (emphasis added):

20. A method, implemented in a computing device that is part of a network, the method comprising:

detecting one or more network switches in the network;

identifying one or more other devices of a particular type in the network;

***obtaining***, for each of the identified one or more other devices and for at least one of the one or more network switches, ***an indication of which port of the network switch the device is coupled to***, wherein the indication is obtained from at least one of the one or more network switches; and

***ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in terms of their inferred physical proximity to the computing device.***

Regarding independent claim 20, Yacoub does not teach “obtaining . . . an indication of which port of the network switch the device is coupled to, wherein the indication is obtained from at least one of the one or more network switches” or “ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in

terms of their inferred physical proximity to the computing device” for reasons described above. Claims 20-28 are allowable over Yacoub for at least that reason.

### 3. Claims 29-37

Independent claim 29 provides as follows (emphasis added):

29. A method, comprising:

***discovering network switches in a network;***

identifying devices connected to the network;

***determining each switch and each port to which the devices are coupled;***

***determining each switch and each port to which a user computer is coupled;*** and

***ranking the devices based upon their inferred physical proximity to the user computer.***

Regarding independent claim 29, Yacoub does not teach “determining each switch and each port to which the devices are coupled”, “determining each switch and each port to which a user computer is coupled”, or “ranking the devices based upon their inferred physical proximity to the user computer” for reasons described above.

Yacoub further does not teach “discovering network switches in a network”. Regarding paragraph 0042 of the Yacoub reference, which is relied upon by the Examiner, Yacoub does not even mention a “switch”.

Claims 29-37 are allowable over Yacoub for at least those reasons.

## **II. Claim Rejections - 35 U.S.C. § 103(a)**

Claim 30 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yacoub* in view of *Office Notice*. Applicant respectfully traverses this rejection.

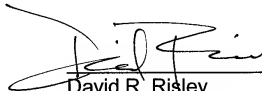
As is identified above, *Yacoub* does not teach several aspects of Applicant's claims. In that the Examiner's application of Official Notice does not remedy the deficiencies of the *Yacoub* reference, Applicant respectfully submits that claim 30 is allowable for at least the same reasons that claim 29 is allowable over *Yacoub*.



### CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

  
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